

Lesson 18: Represent Situations with Multiplication and Division

- Let's represent problems with multiplication and division equations.

Warm-up: Number talk: Three and a Tenth

Find the value of each expression mentally.

- $3 \times \frac{1}{10}$

- $\frac{1}{10} \times 3$

- $\frac{1}{10} \div 3$

- $3 \div \frac{1}{10}$

18.1: Putting it All Together: Multiplication and Division

1. Diego's dad is making hamburgers for the picnic. There are 2 pounds of beef in the package. Each burger uses $\frac{1}{4}$ pound. How many burgers can be made with the beef in the package?
 - a. Draw a diagram to represent the situation.

b. Write a division equation to represent the situation.

c. Write a multiplication equation to represent the situation.

2. Diego and Clare are going to equally share $\frac{1}{4}$ pound of potato salad. How many pounds of potato salad will each person get?
- Draw a diagram to represent the situation.

b. Write a division equation to represent the situation.

c. Write a multiplication equation to represent the situation.

18.2: Multiplication or Division?

For your set of problems:

- Write a multiplication or division expression for each situation.
- Answer the question and write an equation. Make sure to include appropriate units. Draw a diagram, if needed.
- Trade papers with your partner, and check your partner's equations. If you disagree, work to reach an agreement.

Partner A:

1. The distance from Han's house to Priya's house is $\frac{4}{5}$ kilometer. Han has walked $\frac{3}{4}$ of the way already. How many kilometers has he walked?

2. Clare's science class will test water samples in class. If there is a total of $\frac{1}{2}$ gallon of water and 10 groups, how much water will each group get if they split the water equally?

3. A container with 3 kilograms of strawberries is $\frac{1}{5}$ full. How many kilograms can the container hold?

